

SEQUENCE LISTING

<110> RIKEN et al.

<120> Method for judging inflammatory diseases using single nucleotide polymorphism within galectin-2 gene

<130> A41618A

<160> 3

<210> 1

<211> 7967

<212> DNA

<213> Homo sapiens

<400> 1

```
gtgaggacac tagccccctg ctgcctgccc cactctgttc atctttgtct ttgcctgggt 60
gggggctttt agggaaaacc attgctgtcc ctctctgggc ctcagtttcc ccatctgtgc 120
agcaaagaag ttggacagag gtcttttttt aaaaaacagc atcttgggcc aggcgtgggtg 180
gctcctgctt gtaatcccag cactttggga ggccgaggct ggtggatcat ctgaggttgg 240
gagtttgaga ccagcctgac caacatggag aaaccccgtc tctactaaaa aaatacaaaa 300
ttggctagga ctggtggcac atgcctgtaa tcccagctaa tggggaggct gaggcaggag 360
aatcacttgg acctgggagg cagaggttat ggtgagccga gattgtgcca ttgcactcca 420
gcctgggcaa caagagttag actccatctc aaaacaacaa caacaataca gcatcttgct 480
ctgtcaccag gtggagtga gtggtggcaa tcataactca ctacggactt gacctccttg 540
gcttaaata tctcccacc tcagcctctt gagtagctgg gaccccaggc actcactacc 600
aactggcta attttgttg tttcttttct ttctcttttt tttttttttt ttgagatgga 660
gtctcgtct gttgccagg ctggagtga gtggcccgat ctcagctcac tgcaacctct 720
gctgcctggg ttcaagcaat tctctggtct cagcctccca agtagctggg attacaggta 780
tgtgtacca cacctggcta atttttttt ttttgttgag atggagtttc tgttgccag 840
gctggagtgc aatggcacga tctcggtca ccacaacttc cacctcccag gttcaagcga 900
ttctcctgcc tcagcctcct gagtagcagg gattacaggc atgggccacc acacccgatt 960
```

aattttgtat ttttagtaga gatggggttt ctccatgttg gtcaggctgg tcttgaactc 1020
ctgatctcag gtgatccacc tgccttggcc tcccaaagtg ctgggattac aggtgtgagc 1080
cactgctcct ggcctaattt ttgtatTTTT aaagtagaga cagggtttca ccatgttggc 1140
caggctgac tcgaactcct gacctcaggt gatccgcca ccttggcctc ccaaagtgct 1200
gggattacag gtgtgagcca cccacccag cttatttctt atttttcgta gagatgaggt 1260
ctcactatgt tgctcaggct gatatcaaac tcctgggttc aagggtacct cctgccttgg 1320
cctctcgaag tgctgagatt acaggtgtga gccactgtgc ctggcctcca ttgatcttta 1380
tagagataaa aaaaaatctc agcttgggca atatagttag accttttctg ctacaggtgc 1440
atgccactac gctttgcctt aaaaaattag tgggggtagc ggcacactcc tcagccttgg 1500
gaggctgagg atcacttgag cccaggaggt cgaggctaca gtgagccgta attgcactac 1560
tgtactccag cctgggcaac agagttagac cttgtctcat ataccacac acaaaacca 1620
agtcttgag agcaaatgc ccaaggccac aagctgcaa tcacaagggg ttgagtggat 1680
tcccactgag gtctctgatt cgttgattct acaccagact ctgccacagc tttactgtgt 1740
ggccttggcc aagtactga ccgtctctga gccccagtct tccttacatc tgtggaagg 1800
gatcacaggc tgcctcttct gaggattaga tgggtattc attgcctagg gctgcaataa 1860
caaattacca ccaaattgtg ggtggcttca cacgatagac gtttgttctg tcttggtttt 1920
ggtgactaga aacctgaaac caaggtgcta cagggtacg ctctgtctga aggcgcaagg 1980
ggagggttct ttcttgcctc ttccagcttc tgggtggctcc tcgcattcct tggttgcatt 2040
cactccaatc tctgcctcca acttcacgtg gactcctctg tgtgtctcgg tctctgtgtc 2100
tatatttctc tcctcttatg agaacactgg tcgtattgga tttaggacca accctaaacc 2160
agtatgacct cttaactcga ttacatatgc aaaggaacta tttttaaata ggtcacattg 2220
aggctgggcg ggggtggctca cccctgtaac cccagcactt tgggaggccg aggcaggcgg 2280
atcacttgag atcaggagtt caagaccagc ctggccaaca tggtgaaacc ctgtctgtac 2340
tgaaaataca aaaacaaaaa agaagaagaa gaagaaaaaa aaattagaca gatgttgttg 2400
tgggcacccg taatcccagc tacttgggag gctgaggcag gagaatcggt tgaacccggg 2460
aggcagaggt tgcagtgagc cgagatcgag cactgtact ccagcctagg tgacagagtg 2520
agacttcac tcacaaaaaa aaaaaaaggc cacattgaca ggttccaggg ggacatgaat 2580

ttctggggga cgctattcaa gtgcaggggg gatgcaggat gtgaatgtgc caggggtcct 2640
 gcgtggaagg gtctatgccc tcatcacctt ctgcctctcg gggaggactg ctgtggccca 2700
 cggactctcc ccaccttctc ttctctggtc atctcacctc tgccttttct ttctctctc 2760
 tccagctcca gaggccatat catccaaatc ccttatacga cagataaggg aaccaaggcc 2820
 cagaaagggg ctaagctggc ccagggccc tctgccaatt aggggcagag tcggcactag 2880
 agtctgggccc cccaactccc cccccccc gctctaggga cgaccacacc cccaccagct 2940
 tctgcctgtc tctctctgcg cctttgactc tgttgggtgg ggacaaggct cccgggcctg 3000
 caccctcccg cagctctcag catccctatt tgtccaagt caccctgac cctggacttc 3060
 cgagtgttc tgccctgcag cagccccac ctctatcctt ggggtttgag ctttctgtt 3120
 tcagtccagg agccccagg agctgcaagg ggagtgtggg tgcttctctt agtccaggcc 3180
 cagctcccct atcctggcct gactgttga gggctcgggg tgtgggcaca ggctgctggc 3240
 aggaggcagg gagccatctc ctgatgcttg gtgtagacg tgtgtgtgcg cagggcacac 3300
 gtctgtgagt gtctgtgtgg cgggcacacc tgtcttctgt ttcttgtttg agcccccttt 3360
 ggactgtcct cactggataa cctcatctcc cagagataat ggtctttgtc agtgagagac 3420
 tgattttttt tttttttttt ttttttttga gacggagtct cgctctgtcg cccaggctgg 3480
 agtgcagtgg cgccatcttg gctcactgca agcaccgct cccgggttca cgccattctc 3540
 ctgcctcagc ctcccagta gctgggacta caggcgctg ccaccacgcc cggctaattt 3600
 tttgtatttt tagtagagac agggtttcac cgtgttagcc aggatgatct cactctcctg 3660
 acctcgtgat ccgccccct cgccctccca aagtgtctggg attacagggtg tgagccaccg 3720
 cccctggcca gcaagagact gattttaatc ccgtctgtct ggctccaaa tctggacca 3780
 accccgttgt gttaagcaaa gacatgggga gttagggtgc cagcctccaa accccacttt 3840
 ctctaaagca gggaggtttt gctcccagga gacaacggac cctgtctgga gacattcttg 3900
 gttgtcaccg ctccaggagg ggtgtcactg acatccagtg ggtagaggcc aggaatactg 3960
 ctcaacatcc tacaacacaa gagacagacc ccaacaaaga aatgcctgcc ccaaactgctc 4020
 agacggccaa ggctgagaag ctctggctctg agcagcctcc tgtctgacat gccgccgtca 4080
 tggcccgtg tcttgggtta agcattgtct cctctctcag gcgtctctta taaaatgtac 4140
 tgccaggccg ggcacagtgg cttacacctg taatcccaac actttgggag gccgaggtgg 4200

gaggatcctt tgagctcagg aggtcgaggc tggcctggac aacatagtga gaccccatct 4260
gaaaaaaaaa aaaatcagct gggccagggt ggatgcctgt ggtccaggct acctgggggg 4320
ctgagggtggg aggattgctt gagcccaaga ggtcaaggct gtagtgagct ctgatcatat 4380
cactgcactc tagcctgggt gacagagcaa gacctttaaa aaaaaatgta ttaccggctg 4440
aggcaggagg accacttgag ggtcaggagt tccagagcag cctgggtaac atagcaaaac 4500
cctatctcta caaaaatttt aaaaattagc tgggcatggt ggacacagtc tatagtcgta 4560
gctacttagg aggctgaggc aggagaatcg tttgagctca ggaggctatg aggctgcatg 4620
cagtgagtta taatcgtgct actgcactcc atcttgggtg acagagcaag accctgtctc 4680
aaaaaaaaaa aaaaaagaaa gaaaagaaaa aaaatgctgg gtgtggtatc tcaccctat 4740
aatcccagaa ctttgggagg cccagagggg aggatcactt gaggtcagga gttcgagacc 4800
aacctggcca aagtggtgaa acccgtctc tactaaaaat acaaagaaaa ttagctagat 4860
atggtggtgg gagcctgtaa tctcagtac tggggaggct gaggcaggat aattgcttga 4920
atctgggaag tggaggttgc agtgagccaa gattgcacca ctgcactcca gcatgggtga 4980
cagagtgaga ctccatctca acatctcaaa aaaaaaaaaa aaagaactta ctgcctgtgg 5040
aagagttgag caatacctaa caacctacc ctacatgtga ccaaccagcg ggtcacttcc 5100
tcctctgcag agaggaggcg gctgccagcg agagggcact gagggtcctc ccatggccac 5160
tgcccccttg acttctggca aagtgcccc gtccaatgag ctcatcagg gcatctcaga 5220
tcatgctttt tctggaaata aaaagtcagt gagcagaact cccacaatgt aaaagtgctc 5280
tcccataagt tgttctaaat ctttgggtgc tgttgctcc tggtcagacc aaccctcacc 5340
ctctggcat agatgcgaaa actggtcttg ggtaatgagt ttttttttt ttttttttt 5400
agacagagtc ttgctctgtc gcctggcaca atctcggtc actgcaacct ccacctctg 5460
ggttcaagcg attctcttgc ctgagcctcc caagtagctg ggacgacagg catgtgccac 5520
cacaccggc taatttttgt atttttaata gagacagggt ttctccatgt tggccaggcc 5580
agtctcaaac tcctgacctc aggtgatcca cccgactcag cctcccaaag tgctgggatt 5640
acaggcgtga gccaccgctc ccagccctgg gtaatgagct ttgaaaaccc agcttagaaa 5700
tcttccttag taaccatcgt gaggctagag gaggtccta ctgtacagaa attcaggtgc 5760
tgctttccta tggaaaataa ggagcagatg aatcttaaca acaagtaatc aaaatgatgg 5820

tcatttgggc agaccactgt ccagaaaaaa agaaaaaatt taaaaaagaa aattaaggct 5880
 gggcttggtt cagcctgta atcccagcac tttggggagc tgaggtgggc agatcaattg 5940
 aggccaggag tttgagacca gccacaccaa catggtgaaa ccttgtctct actaaaaatg 6000
 caaaaattag gcatggtggt acatgcctgt agtcccagct actcgggagg ctgaggcagg 6060
 agaatcgctt gaacctgaga ggtggaggtt gcagtgagtc gagatcgcac cgttgcactc 6120
 cagcctgggc gacaaagcaa gactctgctc aaaaaaacia aaaaaaaaac aaaaaaagaa 6180
 aaggaaagta aaacaataaa tgatggtggt cctgtgattt gctgttggtc tacgtgaggc 6240
 cctgtgcatg ggatttcaca aacatgttct tgaatcctct caaaaccagc ttgaagggtg 6300
 gtggtgtctc cctggtgtga cagggtctgt catacagctg gcattcagca acaacaacia 6360
 caaaaataga aatgggagtc tcgctatgtt gccaggtg gtctccaact cctgggctca 6420
 agtgaccctc ctgtctcagc atcctgagta gctggaatac aggtacacac ttccacaccc 6480
 aggctatcaa ctgtttttta aatgaataaa tcaaattagt caattttaca gaaggggaaa 6540
 gtgaggcttg gagagagact ttgatggaca taggacttgc ggagttttat agattcttag 6600
 tttttgttcg tttgtttgtt tttgtttttg agacagagtc ttgctctgtt gcctaggctg 6660
 gagtgcagtg gcgtgatctt gtcttactgc aacctctgcc tcccaggctt aagccgttct 6720
 cctgcctcag cctcccaagt agctgggact atagatgcgt gccaccacac ctggctaatt 6780
 tttgcatttt tagtagagac agggttaaat gttaggcaga ctggtcttaa actcctgacc 6840
 tcaggatgac tggctgcctc ggctttccaa agtgctggga ttacagggtg gagccactgt 6900
 gcccgccctt ttttttttgt ttttctttga gatgaaaagt cactcttgct gccaggctg 6960
 gagtgcaatg gtacgatctc agtcatggc aacctccgct tccagaattc aagcaattct 7020
 cccgcctcag cctcccaagt agctgggatt acaggcgccc gccaccatgc gcagataatt 7080
 tattttattt tattttattt attattatta ttattattat tattattatt tttgagatgg 7140
 agtttcgctc tgtcgcccag gctggagggc agtgacgca tctcacctca ctgcaagctc 7200
 cgctcccgg gttcacacca ttctctgcc tcagcctccc gagtagctgg gactacaggc 7260
 acctgccacc acaccggct aactttttgt attttttagta gagatggggt ttcacatgt 7320
 tagccaggat ggtctcgatc tctgacctc gtgatccgcc cgctcggcc tccaaaagt 7380
 gttgggatta cagggtgtgag ccaccgctc cgccaattt tttttttt agtagagacg 7440

aggtttcacc atgttgccca ggctgggtgc taactcctga cctcaggtga tcagcccgcc 7500
 tcggcctccc aaaatgctgg gattacaggc gtgagcccct gcacctggcc agatttagtt 7560
 ttgggtgggc caagatcttg tgccctctgat acagtcattt tccatatcat atttttgttt 7620
 ctggggttct gctgaggga gctgatttc atcacttgaa cactttgcgg aactgggcag 7680
 gaagcactct gccatttca tagatgggca aactgagcct ccgtcctgtg cctcttcggg 7740
 ttggggtgga taagagcaaa acagggcagg gagtggggaa gctctgggag gccttgatca 7800
 gagcgctctg gctctgccac tttccagctt ggtgggtctcc tgcgtcctca cgtgggcagg 7860
 gggattgaga cctgcagctg ggttggcatg aggtggatga agctgctggg caagtgtggg 7920
 attgatttcc tgtggggact cgagtggaat gtttctctgt tggccca 7967

<210> 2

<211> 9821

<212> DNA

<213> Homo sapiens

<400> 2

gggagatgca ggcggggaga cacaaggtag aaggggcaaa gtcctcacct aggaccttga 60
 gggagttaat gtgtaatatt ctaggatata agcttgacca cgagttgaga ccctgagcac 120
 aggccctcag gagccgctgg gagctgccgc caggagctgt caccatgacg gtgaggacac 180
 tagcccccctg ctgcctgccc cactctgttc atctttgtct ttgcctgggt gggggctttt 240
 agggaaaacc attgctgtcc ctctctgggc ctacagtttc ccatctgtgc agcaaagaag 300
 ttggacagag gtcttttttt aaaaaacagc atcttgggcc aggcgtgggt gtcctgctt 360
 gtaatcccag cactttggga ggccgaggct ggtggatcat ctgaggttgg gagtttgaga 420
 ccagcctgac caacatggag aaaccccgtc tctactaaaa aaatacaaaa ttggctaggc 480
 ctggtggcac atgcctgtaa tcccagctaa tggggaggct gaggcaggag aatcacttgg 540
 acctgggagg cagaggttat ggtgagccga gattgtgcca ttgcactcca gcctgggcaa 600
 caagagttag actccatctc aaaacaacaa caacaatata gcattctgct ctgtcaccag 660
 gtggagtgca gtgggtggca tcataactca ctacggactt gacctccttg gcttaaatga 720
 tctcccacc tcagcctctt gagtagctgg gacccaggc actcactacc aactggcta 780

attttgtttg tttcttttct ttctcttttt tttttttttt ttgagatgga gtctcgctct 840
 gttgccagg ctggagtga gtggccgat ctgagctcac tgcaacctct gctgcctggg 900
 ttcaagcaat tctctggtct cagcctccca agtagctggg attacaggta tgtgtcacca 960
 cacctggcta attttttttt ttttgttgag atggagtttc tgttgcccag gctggagtgc 1020
 aatggcacga tctcggtca ccacaacttc cacctcccag gttcaagcga ttctcctgcc 1080
 tcagcctcct gagtagcagg gattacaggc atgggccacc acaccgatt aattttgtat 1140
 ttttagtaga gatggggttt ctccatgttg gtcaggctgg tcttgaactc ctgatctcag 1200
 gtgatccacc tgccttgccc tcccaaagtg ctgggattac aggtgtgagc cactgctcct 1260
 ggcctaattt ttgtattttt aaagtagaga cagggtttca ccatgttggg caggctgac 1320
 tcgaactcct gacctcaggc gatccgcca ccttgccctc ccaaagtgt gggattacag 1380
 gtgtgagcca cccaccag cttatttctt attttctgta gagatgaggt ctactatgt 1440
 tgctcaggct gatatcaaac tcttggttc aagggtcct cctgccttg cctctcgaag 1500
 tgctgagatt acaggtgtga gccactgtgc ctggcctcca ttgatcttta tagagataaa 1560
 aaaaaatctc agcttgggca atatagtgag accttttctg ctacaggtgc atgccactac 1620
 gctttgcctt aaaaaattag tgggggtagc ggcacactcc tcagccttg gaggtgagg 1680
 atcacttgag cccaggaggt cgaggctaca gtgagccgta attgcactac tgtactccag 1740
 cctgggcaac agagtgagac cttgtctcat ataccacac aaaaaacca agtcttgag 1800
 agcaaattgc ccaaggccac aagctgcaa tcacaagggg ttgagtggat tccactgag 1860
 gtctctgatt cgttgattct acaccagact ctgccacagc tttacttgtt ggccttgccc 1920
 aagtcactga ccgtctctga gcccagtct tccttacatc tgtggaagg gatacaggc 1980
 tgctcttct gaggattaga tgggtgtatc attgcctagg gctgcaataa caaattacca 2040
 ccaaattgtg ggtggcttca cacgatagac gttgttctg tcttggtttt ggtgactaga 2100
 aacctgaaac caagtgcta cagggtacg ctctgtctga aggcgcaagg ggagggttct 2160
 ttcttgctc ttccagcttc tgggtgctcc tcgcattcct tggttgcat cactccaatc 2220
 tctgctcca acttcagtg gactcctctg tgtgtctccg tctctgtgtc tatatttctc 2280
 tctcttatg agaacttg tcgtattgga tttaggacca accctaaacc agtatgacct 2340
 cttactcga ttacatatgc aaaggaacta tttttaataa ggacacattg aggtgggcg 2400

gggtggctca cccctgtaat cccagcactt tgggaggccg aggcaggcgg atcacttgag 2460
 atcaggagtt caagaccagc ctggccaaca tggtgaaacc ctgtctgtac tgaaaataca 2520
 aaaacaaaaa agaagaagaa gaagaaaaaa aaattagaca gatgttgtgg tgggcacccg 2580
 taatcccagc tacttgggag gctgaggcag gagaatcggg tgaacccggg aggcagaggt 2640
 tgcagtgagc cgagatcgag cactgtact ccagcctagg tgacagagtg agacttcac 2700
 tcaaaaaaaaa aaaaaaaggt cacattgaca ggttccaggt ggacatgaat tttcggggga 2760
 cgctattcaa gtgcaggggg gatgcaggat gtgaatgtgc caggggtcct gcgtggaagg 2820
 gtctatgccc tcataccct ctgcctctcg gggaggactg ctgtggccca cggactctcc 2880
 ccaccttctc tttctggtc atctacctc tgccttttct ttcctctctc tccagctcca 2940
 gaggccatat catccaaatc cttatacga cagataaggg aaccaaggcc cagaaagggg 3000
 ctaagctggc cccaggcccc tctgccaatt aggggcagag tcggcactag agtctgggcc 3060
 cccaactccc ccccccca gctctagga cgaccacacc cccaccaggt tctgcctgtc 3120
 tctctctgcg cttttgactc tgttggtgg ggacaaggct cccgggcctg caccctcccg 3180
 cagctctcag catccctatt tgtccaagt caccctgac cctggacttc cgagtgttc 3240
 tgccctgcag cagccccac ctctatcctt ggggtttgag ctttgctgtt tcagtcaggc 3300
 agccccagg agctgcaagg ggagtgtgg tgccttctctt agtccaggcc cagctcccct 3360
 atcctggcct gactgttgca gggctcgggg tgtgggcaca ggctgctggc aggaggcagg 3420
 gagccatctc ctgatgctt gtgttagacg tgtgtgtgcg cagggcacac gtctgtgagt 3480
 gtctgtgtgg cgggcacacc tgtcttctgt ttcttgtttg agcccccttt ggactgtcct 3540
 cactggataa cctcatctcc cagagataat ggtctttgtc agtgagagac tgattttttt 3600
 tttttttttt ttttttttga gacggagtct cgctctgtcg cccaggctgg agtgcagtgg 3660
 cgccatcttg gctcaactga agcaccgcct cccgggttca cgccattctc ctgcctcagc 3720
 ctcccagagta gctgggacta caggcgctg ccaccacgcc cggctaattt tttgtatttt 3780
 tagtagagac agggtttcac cgtgttagcc aggatgatct cactctcctg acctcgtgat 3840
 ccgccccctt cggcctccca aagtgtggg attacagggtg tgagccaccg cccctggcca 3900
 gcaagagact gattttaac ccgtctgtct ggctccaaaa tctggacca accccgttgt 3960
 gttaagcaaa gacatgggga gttaggtgtc cagcctccaa accccacttt ctctaaagca 4020

gggaggTTTT gctcccagga gacaacggac cctgtctgga gacattcttg gttgtcaccg 4080
 ctcaggggag ggtgtcactg acatccagtg ggtagaggcc aggaatactg ctcaacatcc 4140
 tacaacacaa gagacagacc ccaacaaaga aatgcctgcc ccaaacgtcc agacggccaa 4200
 ggctgagaag ctctggctg agcagcctcc tgtctgacat gccgccgtca tggcccgtg 4260
 tcctgggtta agcattgctg cctcctccag gcgtctctta taaaatgtac tgccaggcog 4320
 ggcacagtgg cttacacctg taatcccaac actttgggag gccgaggtgg gaggatcctt 4380
 tgagctcagg aggtcgaggc tggcctggac aacatagtga gaccccatct gaaaaaaaaa 4440
 aaaatcagct gggccaggtg ggatgcctgt ggtccaggct acctgggggg ctgaggtggg 4500
 aggattgctt gagcccaaga ggtcaaggct gtagtgagct ctgatcatat cactgcactc 4560
 tagcctgggt gacagagcaa gacctttaaa aaaaaatgta ttaccggctg aggcaggagg 4620
 accacttgag ggtcaggagt tccagagcag cctgggtaac atagcaaaac cctatctcta 4680
 caaaaatttt aaaaattagc tgggcatggt ggcacacgtc tatagtcgta gctacttagg 4740
 aggctgaggc aggagaatcg tttgagctca ggaggctatg aggctgcatg cagtgagtta 4800
 taatcgtgct actgcactcc atcttgggtg acagagcaag accctgtctc aaaaaaaaaa 4860
 aaaaaagaaa gaaaagaaaa aaaatgctgg gtgtggtatc tcaccctat aatcccagaa 4920
 ctttgggagg ccagagggg aggatcactt gaggtcagga gttcgagacc aacctggcca 4980
 aagtggtgaa acccgtctc tactaaaaat acaaagaaaa ttagctagat atggtgggtg 5040
 gagcctgtaa tctcagtac tcgggaggct gaggcaggat aattgcttga atctgggaag 5100
 tggaggttgc agtgagccaa gattgcacca ctgcactcca gcatgggtga cagagtgaga 5160
 ctccatctca acatctcaaa aaaaaaaaaa aaagaactta ctgcctgtgg aagagttgag 5220
 caatacctaa caacctacc ctacatgtga ccaaccagcg ggtcacttcc tcctctgcag 5280
 agaggaggcg gctgccagcg agagggcact gaggtcctc ccatggccac tgcccccttg 5340
 acttctggca aagtgcccc gtccaatgag ctcatcagg gcatctcaga tcatgctttt 5400
 tctggaaata aaaagtcagt gagcagaact ccacaaatgt aaaagtgtcc tcccataagt 5460
 tgttctaaat ctttgggtgcc tgttgcgtcc tggtcagacc aacctcacc ctctgggtcat 5520
 agatgcgaaa actggtcttg ggtaatgagt ttttttttt ttttttttt agacagagtc 5580
 ttgctctgtc gcctggcaca atctcggtc actgcaacct ccacctctg ggttcaagcg 5640

attctcttgc ctcagcctcc caagtagctg ggacgacagg catgtgccac cacacccggc 5700
 taatTTTTgt atTTTtaata gagacagggt ttctccatgt tggccaggcc agtctcaaac 5760
 tcctgacctc aggtgatcca cccgactcag cctcccaaag tgctgggatt acaggcgtga 5820
 gccaccgctc ccagccctgg gtaatgagct ttgaaaaccc agcttagaaa tcttccttag 5880
 taaccatcgt gaggctagag gaggctccta ctgtacagaa attcaggctg tgctttccta 5940
 tggaaaataa ggagcagatg aatcttaaca acaagtaatc aaaatgatgg tcatttgggc 6000
 agaccactgt ccagaaaaaa agaaaaaatt taaaaaagaa aattaaggct gggcttgggt 6060
 cagcctgta atcccagcac ttgggggagc tgagggtggc agatcaattg aggccaggag 6120
 ttgagacca gccacaccaa catggtgaaa ccttgtctct actaaaaatg caaaaattag 6180
 gcatggtggt acatgcctgt agtcccagct actcgggagg ctgaggcagg agaatcgctt 6240
 gaacctgaga ggtggagggt gcagtgagtc gagatcgcac cgttgcactc cagcctgggc 6300
 gacaaagcaa gactctgctc aaaaaaaca aaaaaaaaac aaaaaagaa aaggaaagta 6360
 aaacaataaa tgatggtggt cctgtgattt gctgttggtc tacgtgaggc cctgtgcatg 6420
 ggatttcaca aacatgttct tgaatcctct caaaaccagc ttgaaggttg gtggtgtctc 6480
 cctggtgtga cagggtctgt catacagctg gcattcagca acaacaaca caaaaataga 6540
 aatgggagtc tcgctatggt gcccaggctg gtctccaact cctgggctca agtgaccctc 6600
 ctgtctcagc atcctgagta gctggaatac aggtacacac ttccacacc aggctatcaa 6660
 ctgtttttta aatgaataaa tcaaattagt caattttaca gaaggggaaa gtgaggcttg 6720
 gagagagact ttgatggaca taggaattgc ggagttttat agattcttag ttttgttcg 6780
 tttgtttgtt tttgtttttg agacagagtc ttgctctggt gcctaggctg gagtgcagtg 6840
 gcgtgatctt gtcttactgc aacctctgcc tcccaggctt aagccgttct cctgcctcag 6900
 cctcccaagt agctgggact atagatgcgt gccaccacac ctggctaatt ttgcatTTT 6960
 tagtagagac agggTTaaat gttaggcaga ctggtcttaa actcctgacc tcaggtgatc 7020
 tggctgcctc ggccttccaa agtgctggga ttacagggtg gagccactgt gcccggcctt 7080
 ttttttttgt ttttctttga gatgaaaagt cactcttgct gcccaggctg gagtgcaatg 7140
 gtacgatctc agctcatggc aacctccgct tccagaattc aagcaattct cccgcctcag 7200
 cctcccaagt agctgggatt acaggcggcc gccaccatgc gcagataatt tattttattt 7260

tattttatatt attattatta ttattattat tattattatt tttagatgg agtttcgctc 7320
tgtagccag gctggagggc agtgacgga tctcacctca ctgcaagctc cgcctcccg 7380
gttcacacca ttctcctgcc tcagcctccc gagtagctgg gactacaggc acctgccacc 7440
acaccgggt aactttttgt attttttagta gagatggggg ttccacatgt tagccaggat 7500
ggctctgac tcctgacctc gtgatccgcc cgcctcggcc tcccaaaagt gttgggatta 7560
cagggtgtgag ccaccgcgtc cggccaattt ttttattttt agtagagacg aggtttcacc 7620
atgttgccca ggctgggtgc taactcctga cctcagggtga tcagcccgcc tcggcctccc 7680
aaaatgctgg gattacaggc gtgagccct gcacctggcc agatttagtt ttgggtgggc 7740
caagatcttg tgcctctgat acagtcattt tccatatcat atttttgttt ctggggttct 7800
gctgagggca gcgtgatttc atcacttgaa cactttgcgg aactgggcag gaagcactct 7860
gccatttca tagatgggca aactgagcct cgcctctgtg cctcttcggg ttggggtgga 7920
taagagcaaa acagggcagg gagtggggaa gctctgggag gccttgatca gagcgtctg 7980
gctctgccac tttccagctt ggtggtctcc tgcgtctca cgtgggcagg gggattgaga 8040
cctgcagctg ggttgcatg aggtggatga agctgctggg caagtgtggg attgattttc 8100
tgtggggact cgagtggaat gtttctctgt tggcccaggg ggaacttgag gtaagaaca 8160
tggacatgaa gccggggtca accctgaaga tcacaggcag catcgccgat ggcaactgatg 8220
ggtgagcaag gtttcagggt tgggggagtc tgcaggcccg gaataggcag ggcgggtggg 8280
gcaggcaggg cagccctgtg aagtgtcag gcaagaggga cgtcaggcca atgggccctt 8340
tttcacaccc ttctccccc acccctgtg gccccactt catgtctgag gctaggtttg 8400
gggacctgca gaatttcaga gttgatgcca tatgtcttat tcttttggcc caacagccat 8460
tgaaggggca ggtggagaag cccctggaac tctgtctggc cccctgcggg gcaggtgcct 8520
ctagggaacg cccaaatccc cagagacacc accctcttta cccagcagaa tggccacagg 8580
ctggcatttc atgagcatta aaccagggca gccaccaggg gaggtgagt ggtctcgtg 8640
gcctcctctt ggttagaacc agcggcctca ccacctcgt ggtcacagt ccagcgaaag 8700
gctctctcgc ctgcagaaca tgtcagcga tcttggaact gtgctttatc tacttttggt 8760
tagagagggg gcgggcagggt gcatgccata ggagctaagg gaaaagtac ttatttctcc 8820
tacttgggtc cctcaagttt gtcaaaatgt gtgataacct tggctgaga ctcccaaatg 8880

aagacacccc atgaccaga atgcccact ttcaggaacc ctgcaggtct agcccaggct 8940
cctgtagtga tcttgccaag aagtcataca accccggttg cacaccata gtgacaggga 9000
gctcaccacc ttaggttggc tgctggtggc taaatttaat aggtcttcag atatctaaga 9060
gatagcattt ctctctcca ggagagccac cccaattcc cgaagctgtc actatcagtt 9120
acccttctct caacagcgtg atccctgctc caaatggaat gtgctaccac agtgctaagt 9180
ctgagcaggt tgttacctcc ctgttttaa ggcacagatc tcaactaaca caagcittga 9240
ttcttcagc ttgtggtcaa ccaaggtcct ccaaccaag ctgctttatc caggcctgag 9300
ccctgaacct cacctgctac cccttctct gcagctttgt aattaatctg ggccagggga 9360
cagacaagct gaacctgcat ttcaaccctc gcttcagcga atccaccatt gtctgcaact 9420
cattggacgg cagcaactgg gggcaagaac aacgggaaga tcacctgtgc ttcagcccag 9480
ggtcagaggt caaggtgagg tcaaaggggg aaagggcact ggggtgatgt caaggggagg 9540
gcccagatgg aagagagcct ggccctggaca caggtgctgg ccttgtttga gccatcaggc 9600
actgccctgg ccattttcca gggcctcctg cctccttgac accctccctc cccacagttc 9660
acagtgacct ttgagagtga caaattcaag gtgaagctgc cagatgggca cgagctgact 9720
tttcccaaca ggctgggtca cagccacctg agctacctga gcgtaagggg cgggttcaac 9780
atgtcctctt tcaagttaa agaataaaag acttccagcc g 9821

<210> 3

<211> 558

<212> DNA

<213> Homo sapiens

<400> 3

ccccccagc tctagggacg accacacccc caccagttc tgccgtgtct tctctgcgc 60
tttgactctg ttgggtgggg acaaggctcc cgggcctgca ccctcccgca gctctcagca 120
tccctatttg tccaagtga ccctgacct tggacttccg agtgcttctg ccctgcagca 180
gccccacct ctatccttgg ggtttgagct ttgctgtttc agtcaggcag ccccaggag 240
ctgcaagggg agtgtgggtg cttctcttag tccaggccca gctccctat cctggcctga 300
ctgttgcagg gctcggggtg tgggcacagg ctgctggcag gaggcaggga gccatctcct 360

gatgcttggt gttagaygtg tgtgtgcgca gggcacacgt ctgtgagtgt ctgtgtggcg 420
ggcacacctg tcttctgttt ctgtttgag ccccttttgg actgtcctca ctggataacc 480
tcattctcca gagataatgg tctttgtcag tgagagactg attttttttt tttttttttt 540
ttttttgaga cggagtct 558